

**AMENDMENTS TO THE SPECIFICATION:**

1. Please insert the following new paragraphs on page 11, beginning after line 4, as follows:

FIGS. 9A and 9B are diagrams illustrating a general hexagonal structure, in the c-plane, for BiI<sub>3</sub>.

FIGS. 10A and 10B are diagrams illustrating a general hexagonal structure, in the c-plane, for PbI<sub>2</sub>.

2. Please amend the paragraph beginning on page 12, line 12, as follows:

More specifically, the employment of ~~InI<sub>3</sub>~~, ~~InI<sub>3</sub>~~, BiI<sub>3</sub> and SnI<sub>2</sub> as a metal halide is more preferable than HgI<sub>2</sub>, PbI<sub>2</sub> and CdI<sub>2</sub>. These materials are basically of hexagonal crystal structure, and the lattice ~~constant~~ constants are nearly the same between these halides with the same halide and different metals. For example, Fig. 9A illustrates a general hexagonal structure, in the c-plane, for BiI<sub>3</sub>. Fig. 9B illustrates a different view of the BiI<sub>3</sub> structure shown in Fig. 9A, this time showing the direction of the c-axis. Similarly, Fig. 10A illustrates a general hexagonal structure, in the c-plane, for PbI<sub>2</sub>. Fig. 10B illustrates a different view of the PbI<sub>2</sub> structure shown in Fig. 10A, this time showing the direction of the c-axis. Since the specific resistance in the direction of the c-axis of hexagonal crystal structure is relatively high, when the X-ray-charge conversion film is constructed by making use of these materials of hexagonal crystal structure in the C-axis direction, it is now possible to suppress the generation of dark current at the interface between different kind of metal halide, thereby making it possible to detect faint signals and hence to improve the performance of the X-ray detector.

3. Please amend the paragraph beginning on page 14, line 26, and ending on page 15, line 1, as follows:

~~Specify~~ A specific example of this laminate structure includes a laminate consisting of a BiI<sub>3</sub> film[[,]] and a PbI<sub>2</sub> film ~~and an InI<sub>3</sub> film.~~

4. Please amend the paragraph beginning on page 28, line 19, as follows:

Moreover, since ~~these InI~~, SnI<sub>2</sub> and BiI<sub>3</sub> can be assumed as being a hexagonal crystal structure as mentioned above and are enabled to take values which are very close to  $a=4.6$  and  $c=7.0$ , it is possible to minimize the misalignment of lattice and to realize very excellent lattice alignment, thus making it possible to substantially obviate the generation of defects.